

APPENDIX A  
PENDING CLAIMS

48. An isolated protein or glycoprotein inhibitor of xylanase, which inhibitor is a water-soluble, alkaline protein or glycoprotein, which protein or glycoprotein comprises an N-terminal amino acid sequence which is at least 70% homologous to SEQ ID NO:1, said inhibitor having a pI of greater than about 7.0, and a molecular weight of about 40-43 kDa as measured by SDS-PAGE.

49. An isolated protein or glycoprotein inhibitor of xylanase, which inhibitor is a water-soluble, alkaline protein or glycoprotein, which protein or glycoprotein comprises an N-terminal amino acid sequence which is at least 70% homologous to SEQ ID NO:1, said inhibitor having a pI of greater than about 7.0 and a molecular weight of about 40-43 kDa as measured by SDS-PAGE, said inhibitor resolving as two separate bands on SDS-PAGE after reduction with  $\beta$ -mercaptoethanol, said two separate bands having molecular weights of about 30 kDa and about 10 kDa.

50. The isolated protein or glycoprotein inhibitor of claim 48 wherein said protein or glycoprotein comprises an amino acid sequence of SEQ ID NO:1.

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51. The isolated protein or glycoprotein inhibitor of claim 49 wherein said protein or glycoprotein comprises an amino acid sequence of SEQ ID NO:1 and said two separate bands comprise an amino acid sequence of SEQ ID NO:1 and SEQ ID NO:2, respectively.

52. The isolated protein or glycoprotein inhibitor of claim 48 wherein said inhibitor is obtainable from a cereal plant, or cereal plant fraction thereof.

53. The isolated protein or glycoprotein inhibitor of claim 49 wherein said inhibitor is obtainable from a cereal plant, or cereal plant fraction thereof.

54. The isolated protein or glycoprotein inhibitor of claim 48 wherein said inhibitor is obtainable from a plant, or cereal plant fraction thereof, selected from the group consisting of wheat, rye, triticale, barley, sorghum, oats, maize and rice.

55. The isolated protein or glycoprotein inhibitor of claim 49 wherein said inhibitor is obtainable from a plant, or cereal plant fraction thereof, selected from the group consisting of wheat, rye, triticale, barley, sorghum, oats, maize and rice.

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56. The isolated protein or glycoprotein inhibitor of claim 50 wherein said inhibitor is obtainable from a plant, or cereal plant fraction thereof, selected from the group consisting of wheat, rye, triticale, barley, sorghum, oats, maize and rice.

57. The isolated protein or glycoprotein inhibitor of claim 51 wherein said inhibitor is obtainable from a plant, or cereal plant fraction thereof, selected from the group consisting of wheat, rye, triticale, barley, sorghum, oats, maize and rice.

65. An isolated wheat protein or glycoprotein inhibitor of xylanase, which inhibitor is a water-soluble, alkaline protein or glycoprotein, which protein or glycoprotein has a pI of greater than about 7.0 and has a molecular weight of about 40-43 kDa as measured by SDS-PAGE, said protein or glycoprotein being able to resolve as two separate bands on SDS-PAGE after reduction with  $\beta$ -mercaptoethanol, said two separate bands having molecular weights of about 30 kDa and about 10 kDa.

66. An isolated cereal protein or glycoprotein inhibitor of xylanase, which inhibitor is a water-soluble, alkaline protein or glycoprotein, which protein or glycoprotein has a pI of greater than about 7.0 and has a molecular weight of about 40-43 kDa as measured by SDS-PAGE, said protein or glycoprotein being able to resolve as two

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separate bands on SDS-PAGE after reduction with  $\beta$ -mercaptoethanol, said two separate bands having molecular weights of about 30 kDa and about 10 kDa, and wherein said cereal is selected from the group consisting of wheat, rye, triticale, barley, sorghum, oats, maize and rice.

67. An isolated cereal protein or glycoprotein inhibitor of xylanase, which inhibitor is a water-soluble, alkaline protein or glycoprotein, which protein or glycoprotein has a pI of greater than about 7.0 and has a molecular weight of about 40-43 kDa as measured by SDS-PAGE, said protein or glycoprotein being able to resolve as two separate bands on SDS-PAGE after reduction with  $\beta$ -mercaptoethanol, said two separate bands having molecular weights of about 30 kDa and about 10 kDa, and wherein said cereal is selected from the group consisting of wheat, rye and barley.

68. An isolated cereal proteinic or glycoproteinic inhibitor of xylanase, which inhibitor is a water-soluble, alkaline protein or glycoprotein, which protein or glycoprotein has a pI of greater than about 7.0 and has a molecular weight of 40-43 kDa as measured by SDS-PAGE and wherein when said cereal proteinic or glycoproteinic inhibitor of xylanase is a wheat proteinic or glycoproteinic inhibitor of xylanase said protein or glycoprotein is able to resolve as two separate bands on SDS-PAGE after

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reduction with  $\beta$ -mercaptoethanol, said two separate bands having molecular weights of about 30 kDa and about 10 kDa.